DEVICE FOR COOLING THE POWER ELECTRONICS INTEGRATED AT THE REAR OF AN ALTERNATOR OR AN ALTERNO-STARTER

ABSTRACT

The invention concerns a rotating electrical machine, in particular an alternator or an alterno-starter for a motor vehicle, comprising: a rotor (1) centered and fixed on a rotating shaft (2) supported by at least one rear bearing (4), the rear bearing (4) including radial cooling fluid outlets (4a, 4d); a stator (3) enclosing the rotor, the stator including a field coil (7) including windings constituting phases of the electrical machine; an electronic power circuit (15) connected to the windings of the stator phases; a heat dissipation bridge (16) including a first surface whereon is mounted the electronic power circuit and a second surface, opposite said first surface and oriented towards the rear bearing, said second surface forming a longitudinal wall of a passageway (17) for cooling fluid circulation, another longitudinal wall of said passageway (17) being formed by the rear bearing (4) supporting the stator wherein the second surface of the heat dissipating bridge (16) comprises cooling means (18) arranged in the fluid circulation passage (17).